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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 04/26/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/803,178

Applicant(s)

PUGH ET AL.

Examiner

Hoang-Vu A Nguyen-Ba

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4, 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is responsive to the application filed March 9, 2001.
2. Claims 1-37 have been examined.

### *Drawings*

3. The drawings are objected to because of minor informality. The term "Shard" in block 120 of Figure 1 appears to be mistyped.

Correction is required.

### *Claim Rejections – 35 USC § 101*

4. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 17 is also rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

6. Claims 34-35 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

While the claims are in the technological arts, they are not limited to "a practical application of an abstract idea which produced a useful, concrete, and tangible result." State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, claim 34 is directed to an apparatus comprising a first and second versions of an application service and a mechanism to determine which version to be used to host a requested application service. This apparatus can be interpreted to be a system of software program per se. Applicants thus fail to disclose that these software programs are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, claim 34 is rejected under 35 U.S.C. § 101.

Claim 35, which depends from claim 34, is therefore rejected for the same reason.

### *Claim Objections*

7. Claims 23, 32, 34 and 36 are objected to because of the following informalities:

In claim 23, a conjunction – and – should be added to the end of line 6, i.e., after “consumers were last used”.

In claim 32, lines 1-2, – to – should be added after “resource monitor is designed”.

In claim 34, line 1, a semi-colon – ; – should be added after “comprising”.

In claim 36, the word “servivce” should be changed to – service –.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

8. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 17 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single claim which claims both a method (in the preamble in this instance) and the means-plus-function (in the body of the claim in this instance) is indefinite under 35 U.S.C. 112, second paragraph. In re **Ex Parte Lyell**, 17 USPQ 2d 1548 (Bd. Pat. App & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

10. Claims 19 and 32 (line 4) recite the limitation "the aggregate allocations" at lines 3-4 (claim 19) and line 4 (claim 32). There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections – 35 U.S.C. § 102*

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

11. Claims 1-37 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,332,168 to House et al. ("House").

### **Claims 1, 7, 9 and 16**

House discloses at least:

*loading the latest version of the runtime library at initialization of the application service provision apparatus (see at least Figure 6, block 610 and related discussion in the specification);*

*during operation, receiving by a dispatcher a request for service for an application (see at least Figure 6, block 635; Figure 7, block 700; and related discussion in the specification);*

*in response, determining by the dispatcher whether the version of the runtime library required by the application is known to the dispatcher (see at least Figures 8, 9, 10 and related discussion in the specification); and*

*if the version of the runtime library required by the application is not known to the dispatcher, inquiring by the dispatcher with the latest version of the runtime library to learn of the required version of the runtime library (see at least Figures 8, 9, 10 and related discussion in the specification).*

### **Claims 2 and 10**

House further discloses *the latest version of the runtime library informing the dispatcher which version of the runtime library is the required version of the runtime library, and the dispatcher caching the required version information (see at least Figures 8, 9, 10 and related discussion in the specification).*

### **Claims 3 and 11**

House further discloses *the dispatcher routing the request of service to the application to handle if the dispatcher is informed by the latest version of the runtime library that the required*

*version of the runtime library is the latest version itself (see at least Figures 8, 9, 10 and related discussion in the specification).*

#### **Claims 4 and 12**

House further discloses *the dispatcher determining whether the required version of the runtime library is loaded if the required version is an earlier version of the runtime library, and if the required earlier version of the runtime library is not loaded, loading the required earlier version (see at least Figures 8, 9, 10 and related discussion in the specification).*

#### **Claims 5 and 13**

House further discloses *the dispatcher routing the request of service to the application to handle if the required earlier version of the runtime library is already loaded or upon loading the required earlier version of the runtime library (see at least Figures 8, 9, 10 and related discussion in the specification).*

#### **Claims 6 and 14**

House further discloses *the dispatcher routing the request for service to the application to handle if the required version of the runtime library is known to the dispatcher (see at least Figures 8, 9, 10 and related discussion in the specification).*

#### **Claim 8**

The rejection of base claim 7 is incorporated. House further discloses further discloses *loading the latest version of the runtime library at initialization of the application service provider apparatus (see at least Figures 8, 9, 10 and related discussion in the specification).*

**Claim 17**

House discloses at least:

*a first resource consumer accepting first allocations of a first plurality of portions of a shared resource, and tracking first points in time the first allocations were last used (see at least 2:15 – 67);*

*a second resource consumer accepting second allocations of a second plurality of portions of the shared resource, and tracking second points in time the second allocations were last used (see at least 2:15 – 67);*

*a resource monitor conditionally requesting the first and second resource consumers to provide said tracked first and second points in time, and the first and second resource consumers responsively providing the tracked first and second points in time as requested (see at least 2:15 – 67);*

*the resource monitor determining which if any of the first and second allocations of the portions of the shared resource are to be released by the first and second resource consumers, and instructing the first and second resource consumers accordingly (see at least 2:15 – 67); and*

*the first and second resource consumers releasing selected ones of the first and second allocations as instructed (see at least 2:15 – 67).*

**Claim 18**

House further discloses *wherein the resource monitor conditionally requests the first and second resource consumers to provide said tracked first and second points in time when aggregated allocations of the shared resource reach a pre-determined threshold (see at least 2 :15 – 67).*



### **Claim 19**

House further discloses *wherein said determining by the resource monitor comprises ordering said provided first and second points in time, and selecting a number of the least recently used allocations to be released to bring the aggregate allocations to at most a predetermined threshold (see at least 2:15 – 67).*

### **Claims 20 and 27**

House discloses at least

*accepting allocations of a plurality of portions of a shared resource (see at least 2:15 – 24; 2:37 – 40);*

*tracking points in time the allocations were last used (see at least 2:15 – 24; 2:37 – 40);*

*receiving a request to provide the tracked points in time (see at least 2:15 – 24; 2:37 – 40);*

*in response, providing the tracked points in time as requested (see at least 2:15 – 24; 2:37 – 40);*

*receiving instructions to release selected ones of the allocations (see at least 2:15 – 24; 2:37 – 40); and*

*releasing the specified allocations as instructed (see at least 2:15 – 24; 2:37 – 40).*

### **Claims 21 and 28**

House further discloses *wherein the apparatus is an application service provision apparatus, and the shared resource consumer is an application requiring application service provision runtime library support (see at least Figure 3 and related discussion in the specification).*

### **Claims 22 and 29**

House further discloses *wherein the apparatus is an application service provision apparatus, and the shared resource consumer is a function of an application service provision runtime library* (see at least Figure 3, and related discussion in the specification).

### **Claims 23, 30 and 36**

House discloses at least:

*conditionally requesting a plurality of shared resource consumers to provide corresponding tracked plurality points in time, where corresponding plurality of portions of a shared resource allocated to the plurality of shared resource consumers were last used* (see at least 2:15 – 67); and

*determining which if any of the plurality of allocations of the portions of the shared resource are to be released by the plurality of shared resource consumers, and instructing the plurality of shared resource consumers to release selected ones of the plurality of allocations accordingly* (see at least 2:15 – 67).

### **Claims 24 and 31**

House further discloses *wherein said conditionally request is made when aggregate allocations of the shared resource reach a pre-determined threshold* (see at least 2:15 – 67).

### **Claims 25 and 32**

House further discloses *wherein said determining comprises ordering said provided plurality points in time, and selecting a sufficient number of the least recently used allocations to be released to bring the aggregate allocations to at most a predetermined threshold* (see at least 2:15 – 67).

### **Claims 26 and 33**

House further discloses *wherein the resource monitor is a component of an application service provision apparatus* (see at least 2:15 – 67).

### **Claim 34**

House discloses at least:

*a first version of an application hosting service* (see at least Figure 3, item 325 and related discussion in the specification);

*a second version of an application hosting service* (see at least Figure 3, item 330 and related discussion in the specification); *and*

*a mechanism to determine whether the first or the second version of the application hosting service is to be employed to host an application service requested* (see at least 4:3 – 5:67).

### **Claim 35**

The rejection of base claim 34 is incorporated. House further discloses *wherein the mechanism comprises a selected one of the first and the second version resolving whether the first or the second version is to be employed to host the application service requested* (see at least 4:3 – 5:67).

### **Claim 37**

House further discloses *wherein said determining comprises a selected one of the first and the second versions resolving whether the first or the second version is to be employed to host the application service requested* (see at least 4:3 – 5:67).

*Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu A Nguyen-Ba whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday-Friday, 6:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANTONY NGUYEN-BA**  
**PRIMARY EXAMINER**

Art Unit 2122

April 20, 2004